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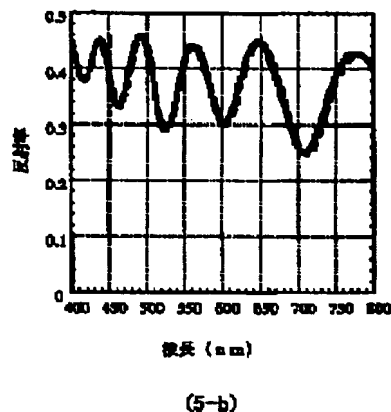
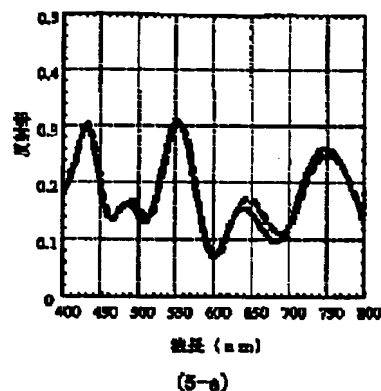
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APPLICATION NUMBER : 10250071

APPLICANT : NIKON CORP;

INVENTOR : USHIO KAJIRO;

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TITLE : DETECTING METHOD, DETECTOR
AND POLISHING DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To provide a method for easily and highly accurately detecting the film thickness and the process end point in any device pattern at through the process end point and the thickness of a removed film could not be detected in the past with sufficient accuracy with a device pattern present on the wafer surface, when optically detecting the thickness of a thin film to be removed from a semiconductor wafer.

SOLUTION: The difference between the maximum/relative maximum reflective rate and the minimum/relative minimum reflective rate of spectral waveforms of a reflected light and a transmitted light obtained by irradiating a probe light on a semiconductor wafer, or the ratio of the minimum/relative minimum value and the maximum/relative maximum value, is used to specify or search the measurement position of a semiconductor wafer surface. An accurate film thickness or process end point can be detected by monitoring at a specific position.

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